

LISTING OF THE CLAIMS:

Kindly replace all prior listing of claim sets with that which appears below:

Claims 1-35. (Cancelled).

36. (Previously Presented) A thermosetting resin composition for adhering materials with dissimilar coefficients of thermal expansion, consisting essentially of:

a) a benzoxazine compound in liquid form at room temperature,

b) one or more thermoset compounds selected from the group consisting of epoxy, cyanate ester, maleimide, acrylate, methacrylate, vinyl ether, styrenic, vinyl ester, propargyl ether, diallylamide, aromatic acetylene, benzocyclobutene, thioleues, maleate, oxazoline, and itaconate,

c) optionally, one or more anti-oxidants, bleed control agents, fillers, diluents, coupling agents, adhesion promoters, flexibilizers, dyes and pigments, and

d) a cure initiator.

37. (Previously Presented) A method for enhancing adhesive strength of a thermosetting resin composition between materials with dissimilar coefficients of thermal expansion, said method consisting essentially of the step of:

incorporating an effective amount of a benzoxazine compound in liquid form at room temperature into a composition comprising one or more thermoset compounds selected from the group consisting of epoxy, cyanate ester, maleimide, acrylate, methacrylate, vinyl ether, styrenic, vinyl ester, propargyl ether, diallylamide, aromatic acetylene, benzocyclobutene, thioleues, maleate, oxazoline, and itaconate; optionally, one or more anti-oxidants, bleed control agents, fillers, diluents, coupling agents, adhesion promoters, flexibilizers, dyes and pigments, and a cure initiator.

38. (Previously Presented) A method according to Claim 37, wherein one of the materials with dissimilar coefficients of thermal expansion has a metallic surface to which the thermosetting resin composition is adhered.

39. (Previously Presented) A method according to claim 38, wherein said metallic surface is copper.

40. (Previously Presented) A method for adhesively attaching a first substrate to a second substrate, said method comprising the steps of

providing the first substrate,
providing the second substrate,

providing a thermosetting resin composition according to claim 37 positioned between said first and second substrates and curing the composition therebetween.

41. (Previously Presented) A method according to claim 40, wherein said first substrate is a semiconductor die and said second substrate is circuit board.

42. (Previously Presented) A method according to claim 40, wherein said first substrate is a semiconductor die and said second substrate has a metallic surface, which is a lead frame.

43. (Previously Presented) A method according to claim 42, wherein said lead frame is a copper lead frame.

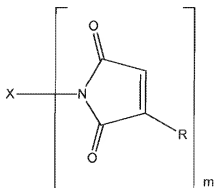
44. (Previously Presented) A composition according to claim 36, wherein said maleimide is in liquid form.

45. (Previously Presented) A composition according to claim 36, wherein said filler is conductive.

46. (Previously Presented) A composition according to claim 36, wherein said filler is electrically conductive.

47. (Previously Presented) A composition according to claim 36, wherein said filler is thermally conductive.

48. (Previously Presented) A composition according to claim 36, wherein said maleimide has the structure:



wherein:

m is 1-3,

each R is independently hydrogen or lower alkyl,

and

X is a straight chain alkyl, alkylene, or alkylene oxide, or branched chain alkyl, alkylene or alkylene oxide, optionally containing cyclic moieties as substituents on said alkyl, alkylene or alkylene oxide chain or as part of the backbone of the alkyl, alkylene or alkylene oxide chain.